

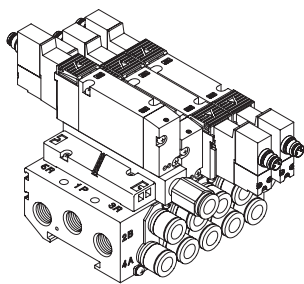
# M4GD1 to 3, M4GE1 to 3 \*0EJ/EX Series

Related products

P4  
Series

Related products

● Air supply spacer



## Specifications

Model No.	P → A/B		A/B → R		Weight g
	C(dm <sup>3</sup> /(s·bar))	b	C(dm <sup>3</sup> /(s·bar))	b	
4G1	0.70	0.23	0.93	0.16	8
4G2	1.6	0.17	1.8	0.16	35
4G3	2.6	0.22	3.1	0.14	56

\*1: Values are when a valve is mounted.

\*2: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

How to order discrete units

● Air supply spacer

Air supply spacer model No.

**4G** **3** **R** - **P** - **GWS10** - **P4**

**A** Air supply spacer model No.

**B** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

Valve model No.

Code	Description	4GD1	4GE1	4GD2	4GE2	4GD3	4GE3
<b>A Air supply spacer model No.</b>							
1	For 4G1	●					
2	For 4G2			●			
3	For 4G3					●	
<b>B Port size</b>							
Blank	M5(4G1), Rc1/8(4G2), Rc1/4(4G3)	●	●	●			
GWS4	ø4 push-in fitting	○					
GWS6	ø6 push-in fitting	○	○				
GWS8	ø8 push-in fitting		○	○			
GWS10	ø10 push-in fitting				○		

is not available.

Accessories: 2 Mounting screws, 2 PR check valves, 1 body gasket

## ⚠ Precautions for model No. selection

\*2: Blank, ① M5 ② Rc1/8 ③ Rc1/4. In addition, they are equivalent to P4 specifications as standard. It is not necessary to add "-P4" to the model No.

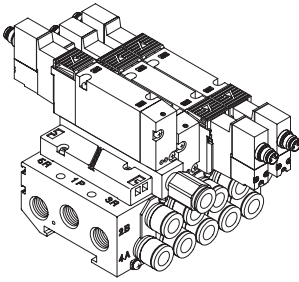
\*3: Specify the air supply spacer mounting position and quantity on the manifold specifications sheet of each catalog.

\*4: Combination with the masking plate is not supported.

\*5: 4G4 air supply spacers are made to order products. Contact CKD Sales for details.

## Related products

### ● Exhaust spacer



### Specifications

Model No.	P → A/B		A/B → R		Weight g
	C(dm <sup>3</sup> /(s·bar))	b	C(dm <sup>3</sup> /(s·bar))	b	
4G1	0.94	0.28	0.68	0.33	7
4G2	1.5	0.24	1.9	0.24	34
4G3	3.4	0.21	2.9	0.27	58

\*1: Values are when a valve is mounted.

\*2: Effective cross-sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

### How to order discrete units

#### ● Exhaust spacer

Exhaust spacer model No.

**4G 3 R - R - GWS10**

**A** Exhaust spacer model No.

**B** Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

Valve model No.					
4GD1	4GE1	4GD2	4GE2	4GD3	4GE3
<b>A Exhaust spacer model No.</b>					
1	For 4G1	●			
2	For 4G2		●		
3	For 4G3			●	
<b>B Port size</b>					
Blank	M5(4G1), Rc1/8(4G2), Rc1/4(4G3)	●	●	●	
GWS4	ø4 push-in fitting	○			
GWS6	ø6 push-in fitting	○	○		
GWS8	ø8 push-in fitting		○	○	
GWS10	ø10 push-in fitting			○	

is not available.

Accessories: 2 Mounting screws, 2 PR check valves, 1 body gasket

### ⚠ Precautions for model No. selection

\*2: Blank, ① M5 ② Rc1/8 ③ Rc1/4. In addition, they are equivalent to P4 specifications as standard. It is not necessary to add "-P4" to the model No.

\*3: Specify the exhaust spacer mounting position and quantity on the manifold specifications sheet of each catalog.

\*4: Combination with the masking plate is not supported.

\*5: 4G4 exhaust spacers are made to order products. Contact CKD Sales for details.

**P4**  
Series

Pneumatic actuator  
Hand/Chuck  
Related products  
Cylinder  
Switch

Vacuum components

Pneumatic valves

Clean air  
components  
controller

Pneumatic auxiliary components  
Speed  
Fitting

Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

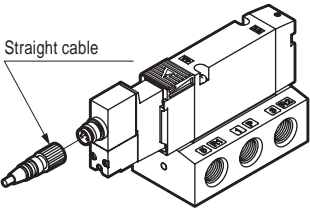
# M4GD1 to 4, M4GE1 to 4\*0EJ/EX Series

Related parts

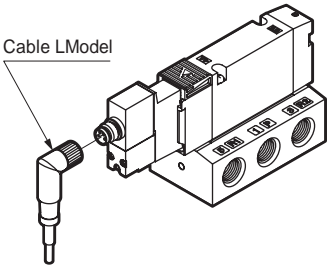
P4  
Series

Related parts

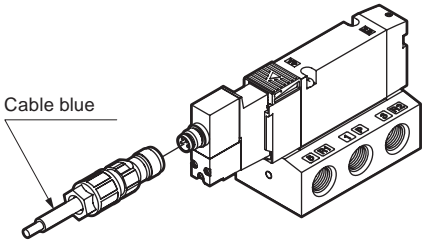
● M8 connector cable



Straight cable (R1)



L-type cable (R2)



Straight cable (R3)

## ◆ Cable Capacitance and Inductance

Type	Capacitance [nF/m] at 1kHz	Inductance [mH/m] at 1kHz
Straight (R1)	0.058	0.003
L type (R2)	0.125	0.003
Straight (R3)	0.065	0.002

## ◆ Minimum bending radius of cable

Type	No load [mm ]	With load [mm ]
Straight (R1)	20.0	36.0
L type (R2)	23.5	42.3
Straight (R3)	20.0	-

4GEX - M8CC - R1 - 300

A Direction B Length

A Direction	4G1	4G2	4G3	4G4
R1 *1	●	●	●	●
R2 *1	●	●	●	●
R3 *2		●	●	●

B Length	
300	Cable length 300mm
500	Cable length 500mm
1000	Cable length 1000mm
3000	Cable length 3000mm

\*1: R1 and R2 types come with a blue marker for identification.

\*2: Available as made to order.

## Related parts

- Sub-plate

### How to order

- 4GD piping adapter



P4 compliant  
as standard

#### A Model No.

Code	Description	3G1	3G2	4G1	4G2	4G3
<b>B Port size (Port P/R1/R2)</b>						
<b>M5</b>	M5	●		●		
<b>06</b>	Rc1/8		●		●	
<b>08</b>	Rc1/4					●

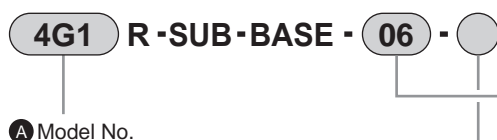
#### C Option

<b>P</b>	With mounting plate (included)	●	●	●	●	●
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is not available.

Note: For 4G4, there is no piping adapter.

- 4GE discrete sub-plate



P4 compliant  
as standard

#### A Model No.

Code	Description	3G1	3G2	4G1	4G2	4G3	4G4
<b>B Port size (Port A/B/P/R1/R2)</b>							
<b>06</b>	Rc1/8	●		●			
<b>08</b>	Rc1/4		●		●	●	
<b>10</b>	Rc3/8					●	●
<b>15</b>	Rc1/2						●

#### C Option

<b>F</b>	A/B port filter integrated *1	●	●	●	●	●	●
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\*1: A filter is built into port P as standard.

is not available.

**P4**  
Series

Pneumatic actuator  
Pneumatic  
cylinders  
Hand/  
Chuck  
Related  
products  
Cylinder  
Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components  
Clean air  
components  
Speed  
controller  
Fitting  
Auxiliary  
valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor  
specification  
Motorless  
specifications

# M4GD1 to 4, M4GE1 to 4\*0EJ/EX Series

Related parts

P4  
Series

Related parts

● Manifold sub-plate kit individual wiring

● M4GD sub-plate

**M4GD1 R-00-2**

A Model No.

P4 compliant  
as standard

Code	Description
<b>A Model No.</b>	
<b>M4GD1</b>	Metal base, 4G1 size, body piping
<b>M4GD2</b>	Metal base, 4G2 size, body piping
<b>M4GD3</b>	Metal base, 4G3 size, body piping
<b>M4GD4</b>	Metal base, 4G4 size, body piping
<b>D Station No.</b>	
<b>2</b>	2 stations
<b>to</b>	to
<b>20</b>	Refer to the specifications page for the max. station number.

● M4GE1 sub-plate

**M4GE1R-C4-D-2-P4**

A Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

B Option

C Mount type

D Station No.

Code	Description		
A Port size			
Port	4(A), 2(B) port	*1	Port P/R1/R2
C18	ø1.8 push-in fitting	○	Rc1/8
C4	ø4 push-in fitting	○	
C6	ø6 push-in fitting	○	
M5	M5	●	

B Option	
Blank	
F	Port A/B filter built in *2

C Mount type	
Blank	Direct mount
D	DIN rail mount *3

D Station No.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station number.

\*2: A filter is built into port P as standard.

\*3: The DIN rail kit needs to be prepared separately.

● Manifold sub-plate kit individual wiring

● M4GE2/3 sub-plate

**M4GE2 R-C4-2-P4**

A Model No.

B Port size

\*1  
The port size of "●" is a standard product and equivalent to P4 specifications. It is not necessary to add "-P4" to the model No.

C Option

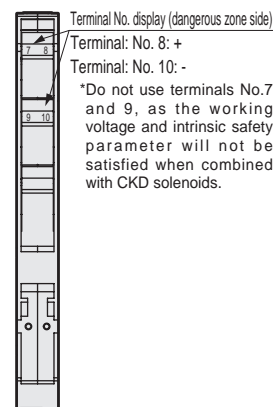
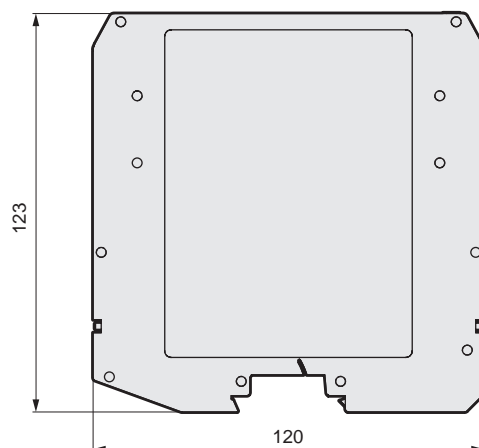
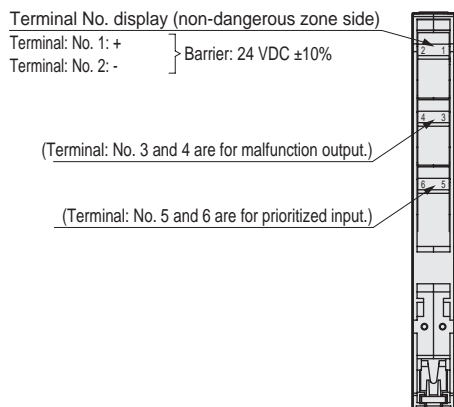
D Station No.

		<b>A Model No.</b>	
		<b>M4GE2</b>	<b>M4GE3</b>
Code	Description		
<b>B Port size</b>			
Port	4(A), 2(B) port	*1	Port P/R1/R2 (1) = Rc1/4 (2) = Rc3/8
<b>C4</b>	ø4 push-in fitting	○	(1)
<b>C6</b>	ø6 push-in fitting	○	(1) (2)
<b>C8</b>	ø8 push-in fitting	○	(1) (2)
<b>C10</b>	ø10 push-in fitting	○	(1) (2)
<b>06</b>	Rc1/8	●	(1)
<b>08</b>	Rc1/4	●	(3)
<b>C Option</b>			
<b>Blank</b>			
<b>F</b>	Port A/B filter built in	*2	
<b>D Station No.</b>			
<b>2</b>	2 stations		
<b>to</b>	to		
<b>20</b>	Refer to the specifications page for the max. station number.		

\*2: A filter is built into port P as standard.

## INSULATED EXPLOSION PROOF BARRIER dimensions

Model No.: **D5048S**



### Barrier intrinsic safety parameters

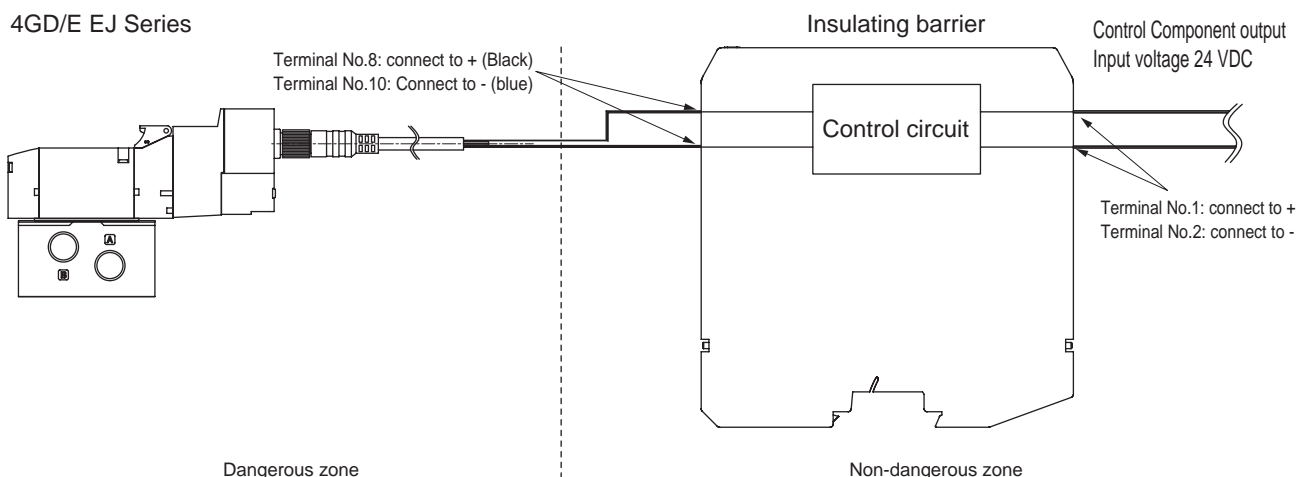
Item	Between terminals No. 8-10
Intrinsic safety circuit max. voltage $U_0$	24.8V
Intrinsic safety circuit max. current $I_0$	108mA
Intrinsic safety circuit max. power $P_0$	667mW
Intrinsic safety circuit allowable capacitance $C_0$	0.113 $\mu$ F
Intrinsic safety circuit allowable inductance $L_0$	1.42mH
Operating ambient temperature range	-40 to 70°C

- \*1: Always use valves in combination with a barrier.
- \*2: Connection terminals are polarized. Take care to prevent incorrect wiring.
- \*3: Applicable wire is 0.25 to 2.5mm<sup>2</sup>.
- \*4: Recommended terminal tightening torque is 0.5 to 0.6N·m.
- \*5: Barrier degree of protection is IP20.

Supply source: IDEC Co., Ltd. (G.M.I.)  
Refer to the IDEC or G.M.I. catalog or the WEB for detailed specifications and a non-judgment document.

## About Valve and Barrier Connections

### 4GD/E EJ Series



\* Voltage equivalent to 12 VDC is supplied to the valve via an insulating barrier.

**P4**  
Series

Pneumatic actuator  
Pneumatic cylinders  
Hand/Chuck  
Related products  
Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components  
Speed controller

Pneumatic auxiliary components  
Fitting  
Auxiliary valve  
Silencer  
Tube

Gas generator

Fluid control components

Electric actuator  
Motor specification  
Motorless specifications

Pneumatic actuator

Pneumatic cylinders

Hand/Chuck

Related products

Cylinder Switch

Vacuum components

Pneumatic valves

Clean air components

Speed controller

Fitting

Auxiliary valve

Silencer

Tube

Gas generator

Fluid control components

Electric actuator

Motorless specifications

Motor specification

M4G<sup>1</sup><sub>23</sub> Manifold specifications sheet

● Contact

● Quantity

set(s)

● Delivery date

/

Slip No.

Order No.

● Manifold model No.

M<sup>D</sup><sub>E</sub> 0EJ- - - - -P4

Solenoid valves

Solenoid position

Port size

Electrical connections

Other options

Mount type

Station No.

Voltage

Date issued

/

/

Company

Contact

Order No.

Solenoid valve model No.		Fitting CX		Valve installation position																								Quantity	
		A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
4G	9EJ																												
4G	9EJ																												
4G	9EJ																												
4G	9EJ																												
4G	9EJ																												
3G	9EJ																												
3G	9EJ																												
Masking plate 4G R-MP																													
Air supply spacer 4G R-P-																													
Exhaust spacer 4G R-R-																													
Mounting rail  L <sub>2</sub> = <div></div> * Write an integer multiple of 12.5.	Included part	Blanking plug																For M <sup>D</sup> <sub>E</sub> 1 0EJ								Push-in fitting tube remover (attached as standard) Not required (check the box) <input type="checkbox"/>			
		GWP 4-B				GWP 6-B				GWP 8-B				GWP 10-B															
		Threaded plug																											
		4G1R-M5P				4G2R-06P				4G3R-08P																			

410

CKD

## P4 Series

## Date issued      /      /

Company

## Contact

Order No. \_\_\_\_\_

**M4G<sup>DA</sup>**  **0EJ-**  -    -  -  - **P4**

Solenoid position      Port size      Electrical connections      Option      Mount type      Station No.      Voltage

[illegible]



# M4G<sup>D<sub>E</sub> 1 2 3</sup>Manifold specifications sheet

Date issued      /      /

Company

## Contact

Order No.

● Contact      ● Quantity      set(s)      ● Delivery date      /

● Manifold model No.

**M G D E 0EX- - - -P4**

### Solenoid valves

Solenoid position

Port size

### Electrical connections

### Other options

Station No.

Voltage

Solenoid valve model No.	Fitting CX		Valve installation position																								Quantity
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4G □ □ □ 9EX- □																											
4G □ □ □ 9EX- □																											
4G □ □ □ 9EX- □																											
4G □ □ □ 9EX- □																											
4G □ □ □ 9EX- □																											
3G □ □ □ 9EX- □																											
3G □ □ □ 9EX- □																											
Masking plate 4G □ □ R-MP																											
Air supply spacer 4G □ □ R-P-																											
Exhaust spacer 4G □ □ R-R-																											
Included parts	Blanking plug																		For M □ G <sub>E</sub> 1 □ EX								
	GWP 4-B		GWP 6-B		GWP 8-B		GWP 10-B		Push-in fitting tube remover (attached as standard) Not required (check the box) <input type="checkbox"/>																		
	Threaded plug																										
	4G1R-M5P		4G2R-06P		4G3R-08P																						

## P4 Series

Date issued      /      /

Company

## Contact

Order No. \_\_\_\_\_

**M4G<sub>ED</sub>4**  **0EX-**  -   -  -  - **P4**

Solenoid position      Port size      Electrical connections      Option      Station No.      Voltage

Solenoid valve model No.	Fitting CX		Valve installation position																								Quantity
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4G 4 9EX-																											
4G 4 9EX-																											
4G 4 9EX-																											
4G 4 9EX-																											
4G 4 9EX-																											
Masking plate 4G 4-MP																											
Included parts	Blanking plug																										
	GWP 8-B				GWP 10-B				GWP 12-B																		
	Threaded plug																										
	4G4-8 P				4G4-10 P				4G4-15 P																		